

## CLAIMS

What is claimed is:

1. A method of disposing of fresh water produced by a hydrocarbon well comprising the steps of:
  - 5 receiving fresh water produced by a hydrocarbon well,
  - metering the input flow of said fresh water,
  - filtering said fresh water,
  - using a source of natural gas to heat said fresh water to create live steam,
  - 10 using said live steam to drive a steam turbine,
  - using the mechanical output of said steam turbine to drive a generator, and
  - exhausting the spent steam from said steam turbine into the atmosphere.

2. The method of claim 1 additionally comprising the steps of:
  - using the electrical output of said generator to operate a natural gas cut-off valve,
  - using the electrical output of said generator to operate an air compressor,
  - using said natural gas cut-off valve to control said source of said natural gas,
  - 5 using the pneumatic output of said air compressor to operate an air actuated high pressure safety shutoff valve,
  - using said air actuated high pressure safety shutoff valve to control said input flow of said fresh water,
  - 10 using said source of natural gas to pre-heat said fresh water, and
  - metering the output flow of said fresh water.

3. Apparatus useful in the disposal of fresh water produced from the wellhead of a hydrocarbon well comprising:

an input flow metering system,

a filter system,

5 a first fluid flow valve,

a primary coil,

a natural gas burner system,

a natural gas safety cut-off valve,

a steam/water separator,

10 a first steam flow valve,

a steam turbine,

a generator,

a power control and distribution panel,

an air compressor and holding tank,

15 an air actuated high pressure safety shutoff valve,

a second steam flow valve,

an outlet return flow meter,

a second water flow valve,

20 a secondary coil,

an exhaust burner chamber, and

a steam exhaust vent;

wherein

said fresh water is input to said input flow metering system,  
    the output of said input flow metering system is in fluid flow communication with the  
    input of said air actuated high pressure safety shutoff valve,  
    the output of said air actuated high pressure safety shutoff valve is in fluid flow  
5     communication with the input of said filter system,  
    the output of said filter system is in fluid flow communication with the input of said  
    first water flow valve,  
    the output of said first water flow valve is in fluid flow communication with the input  
    of said primary coil,  
10    the output of said primary coil is in steam flow communication with the input of said  
    steam/water separator,  
    the output of said steam/water separator is in steam flow communication with the  
    input of said first steam flow valve,  
    the output of said first steam flow valve is in steam flow communication with the  
15    input of said steam turbine,  
    the mechanical output of said steam flow turbine is in mechanical communication  
    with the input of said generator,  
    the steam output of said steam flow turbine is in steam flow communication with the  
    input to said steam exhaust vent,  
20    the electrical output of said generator is in electrical communication with the input to  
    said electrical control panel,  
    the heat output of said natural gas burner system is in heat transfer communication

with said primary coil,

the heat output of said natural gas burner system is in heat transfer communication with said secondary coil,

the output of said filter system is in fluid flow communication with the input of said 5 second water flow valve,

the output of said second water flow valve is in fluid flow communication with the input of said secondary coil,

the output of said secondary coil is in fluid flow communication with the input of said primary coil,

10 the output of said steam/water separator is in steam flow communication with the input of said second steam flow valve,

the output of said second steam flow valve is in steam flow communication with the input of said outlet return flow meter,

the output of said outlet return flow meter is in fluid flow communication with the 15 source of said fresh water,

the output of said electrical control panel is in electrical communication with the input to said natural gas safety cut-off valve,

the output of said electrical control panel is in electrical communication with the input to said air compressor and holding tank.

20 the output of said air compressor and holding tank is in pneumatic communication with the input of said air actuated high pressure safety shutoff valve,

the output of said natural gas safety cut-off valve is in gas flow communication with

the input to said natural gas burner system, and  
the input of said natural gas safety cut-off valve is in gas flow communication with a  
source of natural gas.